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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,093	06/13/2007	Simon Davies	713-1287	9992
33712 7590 12/07/2010 LOWE, HAUPTMAN, HAM & BERNER, LLP (ITW) 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
CHAUDRY, ATIF H				
ART UNIT		PAPER NUMBER		
3753				
MAIL DATE		DELIVERY MODE		
12/07/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/598,093

**Applicant(s)**

DAVIES ET AL.

**Examiner**

ATIF H. CHAUDRY

**Art Unit**

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23,25-32 is/are pending in the application.  
4a) Of the above claim(s) 26-32 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 and 25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-510/510a)  
Paper No(s)/Mail Date 08/17/06,03/17/08,05/05/09  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 26-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 09/09/2010.
2. Applicant's election with traverse of Invention I (claims 1-23, 25) in the reply filed on 09/09/2010 is acknowledged. The traversal is on the ground(s) that search of entire application can be made without serious burden. This is not found persuasive because during the national stage as a Designated or Elected Office under 35 U.S.C. 371, PCT Rule 13.1 and 13.2 will be followed when considering unity of invention of claims of different categories **without regard** to the practice in national applications filed under 35 U.S.C. 111 (MPEP 1850) and the group of inventions do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I discloses a valve housing connected to a spray gun and an air supply and having a pressure gauge having no common special technical features to the invention of Group II which comprises a pair of cavities each having a circular portion and a segmented portion.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 17, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwartz et al. (5282493).

5. Schawrtz et al. (Fig. 3) discloses a pressure monitoring device comprising inlet and outlet with coupling means, a digital pressure gauge 46 (col 3, line 7) a valve 20 arranged on line with the gauge, the valve having adjustment means accessible from outside of housing, the pressure takeoff point being downstream of the valve (when the fluid flow is from top to the bottom). The paint spay gun and compressed air supply are seen as intended use terms which hold no patentable weight.

6. Claims 1, 17, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by John Rogers (20030230636).

7. John Rogers (Fig. 1) discloses a pressure monitoring device for a paint spray gun 112 having a digital pressure gauge 109 downstream of a flow control valve 110 coupled to a compressed air supply (at 104).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 2, 17-21, 23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis Rogers (1652051) in view of John Rogers (20030230636).

11. Curtis Rogers (Fig. 1) a pressure monitoring and control device for a compressed air supply system having a pressure gauge 10 downstream of a flow control valve 30 orthogonally opposite and in line with each other, inlet and outlet being in line with each other. Curtis Rogers fails to disclose a digital pressure gauge or the outlet connected to a spray gun. John Rogers (Fig. 1) teaches a pressure monitoring device for a paint spray gun 112 having a digital pressure gauge 109 downstream of a flow control valve 110 coupled to a compressed air supply (at 104). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the device disclosed by Curtis Rogers with a digital gauge as taught by John Rogers in order to improve the accuracy. In view of teachings of John Rogers, it would have been obvious to use the device of Curtis Rogers in a paint spray system as a

flow/pressure control and monitoring device. Regarding claim 19, the method of manufacturing the device does not hold patentable weight since "If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process". Regarding claim 23, adjusting the resolution of the pressure gauge would have been obvious to a person of ordinary skill in the art. Regarding claims 20 and 21, the choice of material (such as zinc) and the sealing strength of housing (such as having IP66 integrity) would have been a matter of obvious choice to a person of ordinary skill in the art based on particular application and work environment.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis Rogers (1652051) in view of John Rogers (20030230636) further in view of Linder (3059858).

13. Curtis Rogers fails to disclose details of the valve. Linder (Fig.) teaches a spray gun having a compressed air supply controlled by a threaded needle valve 24. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the device disclosed by Curtis Rogers with a threaded needle valve as taught by Linder as a well-known control valve.

14. Claims 3-7, 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis Rogers (1652051) in view of John Rogers (20030230636) further in view of Gifford et al. (2630291).

15. Regarding claims 3-7, 9, 10, 12, 13, Curtis Rogers discloses a pair of cavities at the inlet and outlet but fails to disclose a segmental portion. Gifford et al. (Fig. 1)

teaches a control valve having a pair of cavities leading to inlet 6 and outlet 8, each cavity having a circular section at the inlet and outlet ends and a segmental section (sections on either side of plain 10 including the valve seat and bore) which are separated from the circular sections by tapered sections (for example the tapered section on top of diagonal plate 4) wherein the chords (plains on either side of horizontal plate 10) are in parallel alignment and a bore 12 passing through the segmental sections, the bore axis being orthogonal to the longitudinal axis of the valve. The cavities are substantially identical. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the device disclosed by Curtis Rogers with a body having segmental and tapered sections as taught by Gifford et al. in order to reduce turbulence in the body. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the pressure take-off point at various locations of the device.

16. Regarding claims 14 and 15, Curtis Rogers as modified with Gifford et al. fails to disclose angles of the tapered section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the optimum ranges of the taper claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

17. Regarding claim 11, Curtis Rogers as modified with Gifford et al. teaches a small chord surface (surface of plain portion 10) and a relatively large arc of the segments. However, it would have been obvious to a person having ordinary skill in the art at the

time of the invention to have provided a longer chord surface based on particular application and space requirements.

18. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis Rogers (1652051) in view of John Rogers (20030230636) and Gifford et al. (2630291) taken with Henry (2718373).

19. Curtis Rogers as modified with Gifford et al. discloses substantially identical tapered sections and cavities but fails to disclose different angles of taper. Henry (Figure) teaches a valve similar to Gifford et al. but with different tapers on each side. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the device disclosed by Curtis Rogers as modified with Gifford et al. with different angles of taper on either side of valve as taught by Henry in order to provide more space in the segment containing the valve head to accommodate the valve head. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the optimum taper angles claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable dimensions and ranges involves only routine skill in the art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ATIF H. CHAUDRY whose telephone number is (571)270-3768. The examiner can normally be reached on Mon-Fri 8-5 Eastern Time.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hepperle can be reached on (571)272-4913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Atif H Chaudry/  
Examiner, Art Unit 3753

/STEPHEN M HEPPERLE/  
Supervisory Patent Examiner, Art  
Unit 3753

12/2/2010